## a.) Amendment to the Claims

- 1. (Currently Amended) A method of treating restless legs syndrome, comprising administering an effective amount of at least one adenosine  $A_{2A}$  receptor antagonist to a patient suffering from restless legs syndrome, which patient does not have Parkinson's disease.
- 2. (Previously Presented) The method of treating restless legs syndrome according to claim 1, wherein the adenosine  $A_{2A}$  receptor antagonist is a xanthine derivative or a pharmaceutically acceptable salt thereof.
- 3. (Previously Presented) The method of treating restless legs syndrome according to claim 2, wherein the xanthine derivative is represented by the following formula (I):

$$R^1$$
 $N$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 

wherein  $R^1$ ,  $R^2$ , and  $R^3$  independently represent hydrogen, lower alkyl, lower alkenyl, or lower alkynyl;  $R^4$  represents cycloalkyl,  $-(CH_2)_n-R^5$  (in which  $R^5$  represents substituted or

unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4), or

 $\{\text{in which } Y^1 \text{ and } Y^2 \text{ independently represent hydrogen, halogen, or lower alkyl; and } Z$  represents substituted or unsubstituted aryl, or

(in which  $R^6$  represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3)}; and  $X^1$  and  $X^2$  independently represent O or S.

4. (Currently Amended) The method of treating restless legs syndrome according to claim 2, wherein the xanthine derivative is represented by the following formula (I-A):

wherein  $R^{1a}$  and  $R^{2a}$  independently represent methyl or ethyl;  $R^{3a}$  represents hydrogen or lower alkyl; and  $Z^a$  represents

(in which at least one of  $R^7$ ,  $R^8$  and  $R^9$  represents lower alkyl or lower alkoxy and the others represent hydrogen; and  $R^{10}$  represents hydrogen or lower alkyl) or

(in which R<sup>6</sup> represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3).

5. (Previously Presented) The method of treating restless legs syndrome according to claim 2, wherein the xanthine derivative is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine.

Claims 6 and 7 (Cancelled).

- 8. (Currently Amended) A method of treating nocturnal myoclonus, comprising administering an effective amount of at least one adenosine  $A_{2A}$  receptor antagonist to a patient suffering from nocturnal myoclonus, which patient does not have Parkinson's disease.
- 9. (Previously Presented) The method of treating nocturnal myoclonus according to claim 8, wherein the adenosine  $A_{2A}$  receptor antagonist is a xanthine derivative or a pharmaceutically acceptable salt thereof.
- 10. (Previously Presented) The method of treating nocturnal myoclonus according to claim 9, wherein the xanthine derivative is represented by the following formula (I):

$$R^1$$
 $N$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 

wherein  $R^1$ ,  $R^2$ , and  $R^3$  independently represent hydrogen, lower alkyl, lower alkenyl, or lower alkynyl;  $R^4$  represents cycloalkyl,  $-(CH_2)_n-R^5$  (in which  $R^5$  represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4), or

 $\{\text{in which } Y^1 \text{ and } Y^2 \text{ independently represent hydrogen, halogen, or lower alkyl; and } Z$ represents substituted or unsubstituted aryl, or

(in which  $R^6$  represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3)}; and  $X^1$  and  $X^2$  independently represent O or S.

11. (Currently Amended) The method of treating nocturnal myoclonus according to claim 9, wherein the xanthine derivative is represented by the following formula (I-A):

wherein  $R^{1a}$  and  $R^{2a}$  independently represent methyl or ethyl;  $R^{3a}$  represents hydrogen or lower alkyl; and  $Z^a$  represents

(in which at least one of  $R^7$ ,  $R^8$  and  $R^9$  represents lower alkyl or lower alkoxy and the others represent hydrogen; and  $R^{10}$  represents hydrogen or lower alkyl) or

(in which  $R^6$  represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3).

12. (Previously Presented) The method of treating nocturnal myoclonus according to claim 9, wherein the xanthine derivative is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine.